



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,003	07/10/2000	HAJIME INOUE	SONYJP-086	6725
530 7590 12/10/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER GRAHAM, PAUL J	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 12/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/600,003

Applicant(s)

INOUE ET AL.

Examiner

Paul J. Graham

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-46, 52-70 and 72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-46, 52-70 and 72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments with respect to claims 31-46, 52-70, 72 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 31, 41, 52, 53, 58, 63, are objected to because of the following informalities: Each of these claims recite "A receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal"; the information is redundant and should read: "A receiving apparatus for receiving a digital broadcasting signal". Appropriate correction is required.
3. Claim 31 is objected to because of the following informality: claim 31 recites the same information unnecessarily in the last paragraph that is recited in the penultimate paragraph of claim 31, that is: "and wherein when said external recording apparatus is in the analog recording mode, said display processing circuit prevents the display of the received digital broadcasting signal only during display of said control panel information". This should be removed from the last paragraph of claim 31. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 31-35, 40-46, 53-57, 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable under Akamatsu et al. (US 7224886) in view of Sparks et al. (US 2002/0018638 A1) in further view of Ohara et al. (US 6292618 B1).

As to claim 31, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

- a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);
- a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1, recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); and
- control panel information (see figs. 6A-6D as control panels) for allowing station selection and recording and reproduction control of a program recorded on a recording medium loaded in said external reproducing apparatus by a predetermined format (see Akamatsu, figs. 6A-6D for station selection (channel/program), select function of view or record and recording device for external apparatus and reservation data of fig. 4 in predetermined format),

Akamatsu does not teach a restriction when analog reproducing; however, Ohara, who discloses image recording and reproducing, does teach this (wherein when said external recording apparatus is in the analog reproducing mode (see Ohara, col. 4, ll. 1-6)), said display processing circuit prevents the display of the received digital broadcasting signal to the user (see Ohara, col. 2, ll. 29-34 for OSD, col. 4, ll. 1-18 and col. 7, ll. 26-50 for change over switch preventing display of received digital signals),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Ohara so that digital and analog signals may be recorded or reproduced without resource conflict (see Ohara, fig. 1).

The combination does not explicitly teach prevention of digital signal when in analog recording mode; however, Sparks, who discloses an OSD insertion, does teach this. Sparks teaches when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during the displaying of said control panel information (see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode); and wherein when said external recording apparatus is in the digital recording mode (see Akamatsu, fig. 10B for when external record app is in digital record mode),

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

and Sparks teaches wherein when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during display of said control panel information (see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode).

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200).

As to claims 32 and 33, Akamatsu, Sparks and Ohara (as combined in claim 31) disclose an apparatus according to claim 31, wherein an alarm message is displayed to the user (see Akamatsu, fig. 7).

The combination fails to teach an alarm message displayed when said display processing circuit prevents the display of the received digital broadcasting signal to the user;

however, it is submitted that it would have been clearly obvious to one of ordinary skill in the art to modify the combined teaching with the an alarm display if the digital signal could not be displayed under analog reproduction (note that Akamatsu does teach the use of warning messages and that Sparks teaches warning messages appropriate to the operational condition (see Sparks, [0026])).

As to claim 34, Akamatsu, Sparks and Ohara (as combined in claim 31) disclose an apparatus according to claim 31, wherein the analog recording mode includes a stop mode (fig. 13) , recording pause (fig. 38) and record mode (fig. 6D) (see Akamatsu, figs. 6D shows analog recording (a mode) and 13 and 38 show stop and suspend (pause)).

As to claim 35, Akamatsu discloses a display method of a receiving apparatus of a digital broadcasting, comprising (see Akamatsu, title and figs. 6-9 disclose a method for displaying): receiving in the receiving apparatus a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed (see Akamatsu, fig. 1, IRD reception); decoding in the receiving apparatus said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal); receiving in the receiving apparatus a transport stream from an external reproducing apparatus (fig. 1, recording device) through a digital interface, the external reproducing apparatus having both analog and digital reproducing modes (see Akamatsu, fig. 4, the communication interface is

a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); displaying an alarm message during a recording mode of the external reproducing apparatus showing that a recording mode of a program recorded on a recording medium loaded in the external reproducing apparatus indicates an analog recording or a digital recording (see Akamatsu, fig. 38 is alarm during record mode and fig. 9 shows the mode during warning or alarm message); and

displaying an alarm message upon attempted reproduction from the external recording apparatus, through the receiving apparatus, of a program recorded in the analog mode (see Akamatsu, fig. 9, analog record) when the external reproducing apparatus is in the digital reproduction mode (see Akamatsu, fig. 10B, for digital reproduce mode option);

Akamatsu does not explicitly teach display of alarm when in digital reproduction mode; however, it is submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use these two features in conjunction with each other to alert the viewer to an error in mode choice.

As to claim 40, it is analyzed similar to claim 39 (see above).

As to claim 41, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);

a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1,

recording device) having both analog and digital recording and reproducing modes(see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); control panel information for allowing station selection and recording and reproduction control of a program recorded on a recording medium loaded in said external reproducing apparatus by a predetermined format (see Akamatsu, figs. 6A-6D for station selection (channel/program), select function of view or record and recording device for external apparatus and reservation data of fig. 4 in predetermined format),

Akamatsu does not teach a restriction when analog reproducing; however, Ohara, who discloses image recording and reproducing, does teach this (wherein when said external recording apparatus is in the analog reproducing mode (see Ohara, col. 4, ll. 1-6)),

said display processing circuit prevents the display of the received digital broadcasting signal to the user (see Ohara, col. 2, ll. 29-34 for OSD, col. 4, ll. 1-18 and col. 7, ll. 26-50 for change over switch preventing display of received digital signals),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Ohara so that digital and analog signals may be recorded or reproduced without resource conflict (see Ohara, fig. 1).

The combination does not explicitly teach prevention of digital signal when in analog recording mode; however, Sparks, who discloses an OSD insertion, does teach this. Sparks teaches when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during the displaying of said control panel information (see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode); and

wherein when said external recording apparatus is in the digital recording mode (see Akamatsu, fig. 10B for when external record app is in digital record mode),

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

and Sparks teaches wherein when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during display of said control panel information(see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode).

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200).

As to claims 42- 44, they are analyzed similar to claims 32-34, respectively.

As to claims 45 and 46, they are analyzed similar to claim 40.

As to claim 53, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising(see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);

a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1,

recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); and

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

and Sparks teaches wherein when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during display of said control panel information(see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode).

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200).

As to claims 54, 55 and 57, they are analyzed similar to claims 36, 37 and 40, respectively (see above).

As to claim 56, it is analyzed similar to claim 34.

As to claim 68, Akamatsu discloses a display method of a receiving apparatus of a digital broadcasting, comprising (see Akamatsu, title and figs. 6-9 disclose a method for displaying):

receiving in the receiving apparatus a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed (see Akamatsu, fig. 1, IRD reception);

decoding in the receiving apparatus said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);

receiving in the receiving apparatus a transport stream from an external reproducing apparatus (fig. 1, recording device) through a digital interface, the external reproducing apparatus having both analog and digital reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device);

displaying an alarm message during a recording mode of the external reproducing apparatus showing that a recording mode of a program recorded on a recording medium loaded in the external reproducing apparatus indicates an analog recording or a digital recording (see Akamatsu, fig. 38 is alarm during record mode and fig. 9 shows the mode during warning or alarm message); and

displaying an alarm message upon attempted reproduction from the external recording apparatus, through the receiving apparatus, of a program recorded in the analog mode (see Akamatsu, fig. 9, analog record)

when the external reproducing apparatus is in the digital reproduction mode (see Akamatsu, fig. 10B, for digital reproduce mode option);

Akamatsu does not explicitly teach display of alarm when in digital reproduction mode; however; it is submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use these two features in conjunction with each other to alert the viewer to an error in mode choice.

As to claim 69, Akamatsu discloses a display method of a receiving apparatus of a digital broadcasting, comprising (see Akamatsu, title and figs. 6-9 disclose a method for displaying): receiving in the receiving apparatus a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed (see Akamatsu, fig. 1, IRD reception); decoding in the receiving apparatus said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal); control panel information (see figs. 6A-6D as control panels) for allowing station selection and recording and reproduction control of a program recorded on a recording medium loaded in said external reproducing apparatus by a predetermined format (see Akamatsu, figs. 6A-6D for station selection (channel/program), select function of view or record and recording device for external apparatus and reservation data of fig. 4 in predetermined format), receiving in the receiving apparatus a transport stream from an external reproducing apparatus (fig. 1, recording device) through a digital interface, the external reproducing apparatus having both analog and digital reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device));

Akamatsu does not teach a restriction when analog reproducing; however, Ohara, who discloses image recording and reproducing, does teach this (wherein when said external recording apparatus is in the analog reproducing mode (see Ohara, col. 4, ll. 1-6)),

said display processing circuit prevents the display of the received digital broadcasting signal to the user (see Ohara, col. 2, ll. 29-34 for OSD, col. 4, ll. 1-18 and col. 7, ll. 26-50 for change over switch preventing display of received digital signals),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Ohara so that

digital and analog signals may be recorded or reproduced without resource conflict (see Ohara, fig. 1).

The combination does not explicitly teach prevention of digital signal when in analog recording mode; however, Sparks, who discloses an OSD insertion, does teach this. Sparks teaches when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during the displaying of said control panel information (see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode); and

wherein when said external recording apparatus is in the digital recording mode (see Akamatsu, fig. 10B for when external record app is in digital record mode),

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

and Sparks teaches wherein when said external recording apparatus is in the analog recording mode (see Sparks, fig. 2, AR), said display processing circuit prevents the display of the received digital broadcasting signal only during display of said control panel information (see Sparks, [0026] and OSD or control panel is added to the signal (analog) and a digital signal is not displayed, due to record mode).

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200).

As to claim 70, it is analyzed similar to claim 32.

6. Claims 52, 58-67 and 72 are rejected under 35 U.S.C. 103(a) as being obvious over Akamatsu et al. (US 7224886) in view of Sparks et al. (US 2002/0018638 A1) in view of Ohara et al. (US 6292618 B1) in further view of Hashimoto et al. (US 5990940).

As to claim 52, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);

a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1, recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); and

a CPU programmed (see Akamatsu fig. 1, processing unit in IRD) for retrieving information associated with a program recorded on a recording medium loaded in said reproducing apparatus from a memory in said reproducing apparatus (see Akamatsu, fig. 47C, reservation data mgt section for memory); and

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to

allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200);

The combined teaching fails to explicitly disclose the displaying of an alarm or message if the user selects an input/output that is inconsistent with the mode of the recorder/reproducer (and therefore could not be decoded).

However, it is submitted that it would have been clearly obvious (as evidenced by Hashimoto col. 11, ll. 17-35 and fig. 14a) to one of ordinary skill in the art at the time the invention was made to modify the combined teaching with the displaying of an alarm if an input or output that is inconsistent with the replay mode so as to notify the user of a problem that may arise in program recording or reproduction.

As to claim 58, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);

a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1, recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); and

a CPU programmed (see Akamatsu fig. 1, processing unit in IRD) for retrieving information associated with a program recorded on a recording medium loaded in said reproducing apparatus

from a memory in said reproducing apparatus (see Akamatsu, fig. 47C, reservation data mgt section for memory); and

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200);

The combined teaching fails to explicitly disclose the displaying of an alarm or message if the user selects an input/output that is inconsistent with the mode of the recorder/reproducer (and therefore could not be decoded).

However, it is submitted that it would have been clearly obvious (as evidenced by Hashimoto col. 11, ll. 17-35 and fig. 14a) to one of ordinary skill in the art at the time the invention was made to modify the combined teaching with the displaying of an alarm if an input or output that is inconsistent with the replay mode so as to notify the user of a problem that may arise in program recording or reproduction.

As to claim 59, Akamatsu and Ohara and Sparks and Hashimoto (as combined in claim 58) disclose an apparatus according to claim 58, wherein said information associated with said program includes at least one of a channel number of the program, a program name, a genre, a date of the recording, and a recording time (see Akamatsu, fig. 30).

As to claim 60, Akamatsu and Ohara and Sparks and Hashimoto (as combined in claim 58) disclose an apparatus according to claim 58, wherein said information associated with said

program includes recording position information of the program on the recording medium (see Akamatsu, fig. 30).

As to claims 61 and 62, they are analyzed similar to claims 45 and 40.

As to claim 63, Akamatsu discloses a receiving apparatus of a digital broadcasting for receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

- a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);
- a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1, recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device)); and
- a CPU programmed (see Akamatsu fig. 1, processing unit in IRD) for retrieving information associated with a program recorded on a recording medium loaded in said reproducing apparatus from a memory in said reproducing apparatus (see Akamatsu, fig. 47C, reservation data mgt section for memory); and

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200);

The combined teaching fails to explicitly disclose the displaying of an alarm or message if the user selects an input/output that is inconsistent with the mode of the recorder/reproducer (and therefore could not be decoded).

However, it is submitted that it would have been clearly obvious (as evidenced by Hashimoto col. 11, ll. 17-35 and fig. 14a) to one of ordinary skill in the art at the time the invention was made to modify the combined teaching with the displaying of an alarm if an input or output that is inconsistent with the replay mode so as to notify the user of a problem that may arise in program recording or reproduction.

As to claims 64 and 65, they are analyzed similar to claims 59 and 60, respectively.

As to claims 66 and 67, they are analyzed similar to claims 45 and 40.

As to claim 72, Akamatsu discloses a method of recording program associated information in a receiving apparatus of a digital broadcasting, comprising (see Akamatsu, fig. 1): receiving a digital broadcasting signal constructed by a transport stream in which video data and audio data have been compressed and multiplexed, comprising (see Akamatsu, fig. 1, the IRD represents a receiving app for a digital broadcast):

- a decoder for decoding said received digital broadcasting signal (see Akamatsu, fig. 1, the IRD is a decoder of the signal);
- a digital interface for receiving a transport stream from an external reproducing apparatus (fig. 1, recording device) having both analog and digital recording and reproducing modes (see Akamatsu, fig. 4, the communication interface is a digital interface with an external reproducing apparatus with D/A record and play modes (see p. 21, ll. 20-25 and fig. 4 shows both a reproducing and recording section on the related device); and
- a CPU programmed (see Akamatsu fig. 1, processing unit in IRD) for retrieving information associated with a program recorded on a recording medium loaded in said reproducing apparatus

from a memory in said reproducing apparatus (see Akamatsu, fig. 47C, reservation data mgt section for memory); and

Akamatsu does not expressly teach the digital broadcast signal is displayed; however, Sparks, who discloses OSD insertion, does teach this (see Sparks [0008] a dig. Signal source is coupled to display regardless of recorder's status).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the apparatus of Sparks in order to allow for display of digital signals during digital record mode without adding extra complexity to the apparatus.

Sparks teaches a display processing circuit for displaying (see Sparks, fig. 2, processing within 200);

The combined teaching fails to explicitly disclose the displaying of an alarm or message if the user selects an input/output that is inconsistent with the mode of the recorder/reproducer (and therefore could not be decoded).

However, it is submitted that it would have been clearly obvious (as evidenced by Hashimoto col. 11, ll. 17-35 and fig. 14a) to one of ordinary skill in the art at the time the invention was made to modify the combined teaching with the displaying of an alarm if an input or output that is inconsistent with the replay mode so as to notify the user of a problem that may arise in program recording or reproduction.

7. Claims 36-39 are rejected under 35 U.S.C. 103(a) as being obvious over Akamatsu et al. (US 7224886) in view of Sparks et al. (US 2002/0018638 A1) in view of Ohara et al. (US 6292618 B1) in further view of Knudson et al. (US 6141488).

As to claim 36, Akamatsu, Sparks, and Ohara (as combined in claim 31) discloses a method according to claim 35,

Akamatsu does not teach an alarm message indicates that a new station cannot be selected by the user during digital recording by the external reproducing apparatus; however,

Knudson, who discloses a system for recording TV programs, does teach this (see Knudson, fig. 3, display message that channel cannot be changed, due to recording).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Akamatsu with the system of Knudson in order to allow for messaging that alerts user to conflict during recording (see Knudson, col. 3, ll. 10-20).

As to claim 37, is analyzed similar to claims 31 and 36 (see above).

Inquiries

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul J. Graham whose telephone number is 571-270-1705. The examiner can normally be reached on Monday-Friday 8:00a-5:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.